Abstract of the Disclosure

Disclosed is an optical imaging method and device enabling display and 3D measurement of tridimensional objects, whereby at least two individual images are captured one after the other and the effective amount of radiation energy for the image conversion is controlled or regulated differently for these individual images. By employing adjustable optical means for the illumination of the object or in the optical path for the imaging of the object on the image converter it is possible to acquire a larger amount of visual information on the object observed than that which is available in an individual image due to the limitations imposed by the design of the converter used. The invention relates to processes and design forms of the device enabling recording units to be designed, using simply and generally commercial components, which are able to display and measure larger objects despite a reduced field of vision imposed by the design. This is especially useful for diagnosis in invasive applications in the bodies of humans or animals.